

## AFT FLADE ENGINE

## ABSTRACT

An aft FLADE gas turbine engine includes a fan section drivenly connected to a low pressure turbine section, a core engine located between the fan section and the low pressure turbine section, a fan bypass duct circumscribing the core engine and in fluid communication with the fan section, and a mixer downstream of the low pressure turbine section and in fluid communication with the fan bypass duct, and an aft FLADE turbine downstream of the mixer. At least one row of aft FLADE fan blades disposed radially outwardly of and connected to the aft FLADE turbine and radially extending across a FLADE duct circumscribing the fan bypass duct. The aft FLADE turbine may be a free turbine or connected to and rotatable with the low pressure turbine section. A power extraction apparatus may be disposed within the engine and drivenly connected to the aft FLADE turbine.